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Pacific oysters in Dutch estuaries

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Publications

- Allen JD (2008) Size-specific predation on marine invertebrate larvae. *The Biological Bulletin* 214: 42-49
- Almeida MJ, Machado J, Coimbra J (1996) The effect of *Polydora* sp. infestation on the shell calcification of the oyster *Crassostrea gigas*. *Bulletin de l'Institut océanographique (Monaco) Numéro spécial* 14: 195-202
- Anayiotos AS, Perry GJ, Myers JG, Green DW, Fan PH, Nanda NC (1995) A numerical and experimental investigation of the flow acceleration region proximal to an orifice. *Ultrasound in Medicine and Biology* 21: 501-516
- Anayiotos AS, Elmahdi AM, Newman BE, Perry GJ, Costa F, Agrawal D, Agrawal G, DeCarvalho CT, Nanda NC (1997) An improved flow evaluation scheme in orifices of different aspect ratios. *Ultrasound in Medicine and Biology* 23: 231-244
- André C, Rosenberg R (1991) Adult larval interactions in the suspension-feeding bivalves *Cerastoderma edule* and *Mya arenaria*. *Marine Ecology Progress Series* 71: 227-234
- André C, Jonsson PR, Lindegarth M (1993) Predation on settling bivalve larvae by benthic suspension feeders: the role of hydrodynamics and larval behaviour. *Marine Ecology Progress Series* 97: 183-192
- Anonymous (1992) Stroomatlas HP15 Westerschelde - Oosterschelde. Koninklijke Marine - Dienst der Getijdewateren (Dutch Royal Navy - Hydrographic Service), Report 17551, The Hague, the Netherlands.
- Anonymous (2002) Effectbeoordeling ontgronding vooroever surfgebied Kabbelaarsbank. Natuur- en Recreatieschap de Grevelingen, Zonnemaire.
- AquaSense (2003) De sublittorale hard-substraat levensgemeenschappen in de Oosterschelde. Uitgebreide omschrijving van de ontwikkelingen in de periode 1985 - 2002. AquaSense, commissioned by the National Institute of Coastal and Marine Management (RWS-RIKZ), the Netherlands, Report 1973-2
- Arakawa KY (1990a) Commercially important species of oysters in the world. *Marine Behaviour and Physiology* 17: 1-13
- Arakawa KY (1990b) Natural spat collecting in the Pacific oyster *Crassostrea gigas* (Thunberg). *Marine Behaviour and Physiology* 17: 95-128
- Armonies W (1994) Drifting meio- and macrobenthic invertebrates on tidal flats in Königshafen: a review. *Helgoländer Meeresuntersuchungen* 48: 299-320
- Ayers JC (1956) Population dynamics of the marine clam, *Mya arenaria*. *Limnology and Oceanography* 1: 26-34
- Banks MA, McGoldrick DJ, Borgeson W, Hedgecock D (1994) Gametic incompatibility and genetic divergence of Pacific and Kumamoto oysters, *Crassostrea gigas* and *C. sikamea*. *Marine Biology* 121: 127-135
- Barillé L, Prou J, Héral M, Bougrier S (1993) No influence of food quality, but ration-dependent retention efficiencies in the Japanese oyster *Crassostrea gigas*. *Journal of Experimental Marine Biology and Ecology* 171: 91-106
- Barry SC, Hayes KR, Hewitt CL, Behrens HL, Dragsund E, Bakke SM (2008) Ballast water risk assessment: principles, processes, and methods. *ICES Journal of Marine Science* 65: 121-131
- Bartholomew A, Diaz RJ, Cicchetti G (2000) New dimensionless indices of structural habitat complexity: predicted and actual effects on a predator's foraging success. *Marine Ecology Progress Series* 206: 45-58
- Bartol IK, Mann R, Luckenbach M (1999) Growth and mortality of oysters (*Crassostrea virginica*) on constructed intertidal reefs: effects of tidal height and substrate level. *Journal of Experimental Marine Biology and Ecology* 237: 157-184
- Bax N, Williamson A, Aguero M, Gonzalez E, Geeves W (2003) Marine invasive alien species: a threat to global biodiversity. *Marine Policy* 27: 313-323
- Bayne BL (1963) Responses of *Mytilus edulis* larvae to increases in hydrostatic pressure. *Nature* 198: 406-407
- Bayne BL (1964a) Primary and secondary settlement in *Mytilus edulis* L. (Mollusca). *Journal of Animal Ecology* 33: 513-523
- Bayne BL (1964b) The responses of the larvae of *Mytilus edulis* L. to light and to gravity. *Oikos* 15: 162-174
- Bayne BL (1969) The gregarious behaviour of the larvae of *Ostrea edulis* L. at settlement. *Journal of the Marine Biological Association of the United Kingdom* 49: 327-356
- Bayne BL (1976) *Marine Mussels: their Ecology and Physiology*. Cambridge University Press, Cambridge
- Bayne BL, Holland DL, Moore MN, Lowe DM, Widdows J (1978) Further studies on the effects of stress in the adult on the eggs of *Mytilus edulis*. *Journal of the Marine Biological Association of the United Kingdom* 58: 825-841
- Bayne BL (2002) A physiological comparison between Pacific oysters *Crassostrea gigas* and Sydney Rock oysters *Saccostrea glomerata*: food, feeding and growth in a shared estuarine habitat. *Marine Ecology Progress Series* 232: 163-178
- Bayne BL (2004) Phenotypic flexibility and physiological tradeoffs in the feeding and growth of marine bivalve molluscs. *Integrative and Comparative Biology* 44: 425-432
- Behrens Yamada S, Dumbauld BR, Kalin A, Hunt CE, Figlar-Barnes R, Randall A (2005) Growth and persistence of a recent invader *Carcinus maenas* in estuaries of the northeastern Pacific. *Biological Invasions* 7: 309-321
- Beukema JJ (1991) The abundance of shore crabs *Carcinus maenas* (L.) on a tidal flat in the Wadden Sea after cold and mild winters. *Journal of Experimental Marine Biology and Ecology* 153: 97-113

- Beukema JJ, Cadée GC (1997) Local differences in macrozoobenthic response to enhanced food supply caused by mild eutrophication in a Wadden Sea area: Food is only locally a limiting factor. *Limnology and Oceanography* 42: 1424 - 1435
- Beukema JJ, Honkoop PJC, Dekker R (1998) Recruitment in *Macoma balthica* after mild and cold winters and its possible control by egg production and shrimp predation. *Hydrobiologia* 375/376: 23-24
- Bij de Vaate A, Jazdzewski K, Ketelaars HAM, Gollasch S, Van der Velde G (2002) Geographical patterns in range extension of Ponto-Caspian macroinvertebrate species in Europe. *Canadian Journal of Fisheries and Aquatic Sciences* 59: 1159-1174
- Blanchard M (1997) Spread of the slipper limpet *Crepidula fornicata* (L. 1758) in Europe. Current state and consequences. *Scientia Marina* 61: 109-118
- Blossey B, Notzold R (1995) Evolution of increased competitive ability in invasive non-indigenous plants: a hypothesis. *Journal of Ecology* 83: 887-889
- Boudouresque CF, Meinesz A, Ribera MA, Ballesteros E (1995) Spread of the green alga *Caulerpa taxifolia* (Caulerpales, Chlorophyta) in the Mediterranean: possible consequences of a major ecological event. *Scientia Marina* 59: 21-29
- Boudry P, Heurtebise S, Collet B, Cornette F, Gérard A (1998) Differentiation between populations of the Portuguese oyster, *Crassostrea angulata* (Lamarck) and the Pacific oyster, *Crassostrea gigas* (Thunberg), revealed by mtDNA RFLP analysis. *Journal of Experimental Marine Biology and Ecology* 226: 279-291
- Bougrier S, Geairon P, Deslous-Paoli JM, Bacher C, Jonquière G (1995) Allometric relationships and effects of temperature on clearance and oxygen consumption rates of *Crassostrea gigas* (Thunberg). *Aquaculture* 134: 143-154
- Bougrier S, Hawkins AJS, Héral M (1997) Preingestive selection of different microalgal mixtures in *Crassostrea gigas* and *Mytilus edulis*, analysed by flow cytometry. *Aquaculture* 150: 123-134
- Brandt G, Wehrmann A, Wirtz KW (2008) Rapid invasion of *Crassostrea gigas* into the German Wadden Sea dominated by larval supply. *Journal of Sea Research* 59: 279-296
- Brilliant MGS, MacDonald BA (2002) Postingestive selection in the sea scallop (*Placopecten magellanicus*) on the basis of chemical properties of particles. *Marine Biology* 141: 457-465
- Brinkman AG, Dankers N, Van Stralen MR (2002) An analysis of mussel bed habitats in the Dutch Wadden Sea. *Helgoland Marine Research* 56: 59-75
- Brinkman AG, Jansen JM (2007) Draagkracht en exoten in de Waddenzee. Wageningen IMARES, Institute for Marine Resources and Ecosystem Studies, Report C073/07, Yerseke, The Netherlands.
- Bruins RWB (1983) *Crassostrea gigas* (Thunberg, 1793) op Texel. Correspondentieblad van de Nederlandse Malacologische Vereniging 215: 1436-1438
- Burke RD (1986) Pheromones and the gregarious settlement of marine invertebrate larvae. *Bulletin of Marine Science* 39: 323-331
- Buroker NE, Hershberger WK, Chew KK (1979) Population genetics of the family Ostreidae. I. Intraspecific studies of *Crassostrea gigas* and *Saccostrea commercialis*. *Marine Biology* 54: 157-169
- Buroker NE (1985) Evolutionary patterns in the family Ostreidae: larviparity vs. oviparity. *Journal of Experimental Marine Biology and Ecology* 90: 233-247
- Butman CA (1987) Larval settlement of soft-sediment invertebrates: the spatial scales of pattern explained by active habitat selection and the emerging role of hydrodynamical processes. *Oceanography and Marine Biology: an Annual Review* 25: 113-165
- Butman CA, Fréchette M, Geyer WR, Starczak VR (1994) Flume experiments on food supply to the blue mussel *Mytilus edulis* L. as a function of boundary-layer flow. *Limnology and Oceanography* 39: 1755-1768
- Cáceres-Martínez J, Robledo JAF, Figueras A (1994) Settlement and post-larvae behaviour of *Mytilus galloprovincialis*: field and laboratory experiments. *Marine Ecology Progress Series* 112: 107-117
- Cadée GC (2001) Herring gulls learn to feed on a recent invader in the Dutch Wadden Sea, the Pacific oyster *Crassostrea gigas*. *Basteria* 65: 33-42
- Cadée GC (2007) Vervangen de recente Japanse oesterriffen de vroegere oesterbanken? *De Levende Natuur* 108: 62-65
- Cadée GC (2008) Scholeksters en Japanse oesters. *Natura* 105: 6-7
- Cardoso JFMF, Witte JI, Van der Veer HW (2006) Intra- and interspecies comparison of energy flow in bivalve species in Dutch coastal waters by means of the Dynamic Energy Budget (DEB) theory. *Journal of Sea Research* 56: 182-197
- Cardoso JFMF, Langlet D, Loff JF, Martins AR, Witte JI, Santos PT, Van der Veer HW (2007) Spatial variability in growth and reproduction of the Pacific oyster *Crassostrea gigas* (Thunberg, 1793) along the west European coast. *Journal of Sea Research* 57: 303-315
- Carlton JT (1987) Patterns of transoceanic marine biological invasions in the Pacific Ocean. *Bulletin of Marine Science* 41: 452-465

- Carlton JT (1989) Man's role in changing the face of the ocean: Biological invasions and implications for conservation of near-shore environments. *Conservation Biology* 3: 265-273
- Carlton JT, Geller JB (1993) Ecological roulette: The global transport of nonindigenous marine organisms. *Science* 261: 78-82
- Carlton JT (1996) Biological invasions and cryptogenic species. *Ecology* 77: 1653-1655
- Carlton JT, Cohen AN (2003) Episodic global dispersal in shallow water marine organisms: the case history of the European shore crabs *Carcinus maenas* and *C. aestuarii*. *Journal of Biogeography* 30: 1809-1820
- Carriker MR (1951) Ecological observations on the distribution of oyster larvae in New Jersey estuaries. *Ecological Monographs* 21: 19-38
- Case TJ, Gilpin ME (1974) Interference competition and niche theory. *Proceedings of the National Academy of Sciences of the United States of America* 71: 3073-3077
- Čiutut A, Widdows J, Pope ND (2007) Effect of *Cerastoderma edule* density on near-bed hydrodynamics and stability of cohesive muddy sediments. *Journal of Experimental Marine Biology and Ecology* 346: 114-126
- Claereboudt M (1999) Fertilization success in spatially distributed populations of benthic free-spawners: A simulation model. *Ecological Modelling* 121: 221-233
- Cognie B, Haure J, Barillé L (2006) Spatial distribution in a temperate coastal ecosystem of the wild stock of the farmed oyster *Crassostrea gigas* (Thunberg). *Aquaculture* 259: 249-259
- Cohen AN, Carlton JT (1998) Accelerating invasion rate in a highly invaded estuary. *Science* 279: 555-558
- Colautti RI, Grigorovich IA, MacIsaac HJ (2006) Propagule pressure: a null model for biological invasions. *Biological Invasions* 8: 1023-1037
- Colwell RK, Futuyma DJ (1971) On the measurement of niche breadth and overlap. *Ecology* 52: 567-576
- Commito JA, Rusignuolo BR (2000) Structural complexity in mussel beds: the fractal geometry of surface topography. *Journal of Experimental Marine Biology and Ecology* 255: 133-152
- Cowden C, Young CM, Chia FS (1984) Differential predation on marine invertebrate larvae by two benthic predators. *Marine Ecology Progress Series* 14: 145-149
- Cragg SM (1980) Swimming behaviour of the larvae of *Pecten maximus* (L.) (Bivalvia). *Journal of the Marine Biological Association of the United Kingdom* 60: 551-564
- Cuddington K, Hastings A (2004) Invasive engineers. *Ecological Modelling* 178: 335-347
- Dame RF (1996) *Ecology of Marine Bivalves: an Ecosystem Approach*. CRC Press, Boca Raton, USA
- Dankers N, Zuidema DR (1995) The role of the mussel (*Mytilus edulis* L.) and mussel culture in the Dutch Wadden Sea. *Estuaries* 18: 71-80
- Dankers NMJA, Meijboom A, De Jong ML, Dijkman EM, Cremer JSM, Fey FE, Smaal AC, Craeymeersch JA, Brummelhuis EBM, Steenbergen J, Baars JMDD (2006) De ontwikkeling van de Japanse oester in Nederland. Wageningen IMARES, Institute for Marine Resources and Ecosystem Studies, Report C040/06, Yerseke, The Netherlands.
- Davenport J, Smith RJW, Packer M (2000) Mussels *Mytilus edulis*: significant consumers and destroyers of mesozooplankton. *Marine Ecology Progress Series* 198: 131-137
- De Bruyne RH (2004) *Veldgids Schelpen*. KNNV Uitgeverij, Utrecht
- De Jonge VN, Essink K, Boddeke R (1993) The Dutch Wadden Sea: a changed ecosystem. *Hydrobiologia* 265: 45-71
- De Jonge VN, De Jong DJ (2002) Ecological restoration in coastal areas in the Netherlands: concepts, dilemmas and some examples. *Hydrobiologia* 478: 7-28
- Del Hoyo J, Elliott A, Sargatal J (1996) *Handbook of Birds of the World. Volume 3: Hoatzin to Auks*. Birdlife International and Lynx Edicions, Barcelona, pp 821 pp.
- Diederich S (2005a) Differential recruitment of introduced Pacific oysters and native mussels at the North Sea coast: coexistence possible? *Journal of Sea Research* 53: 269-281
- Diederich S (2005b) Invasion of Pacific oysters (*Crassostrea gigas*) in the Wadden Sea: competitive advantage over native mussels. PhD thesis, University of Kiel, Germany, 154 pp.
- Diederich S, Nehls G, Van Beusekom JEE, Reise K (2005) Introduced Pacific oysters (*Crassostrea gigas*) in the northern Wadden Sea: invasion accelerated by warm summers? *Helgoland Marine Research* 59: 97-106
- Diederich S (2006) High survival and growth rates of introduced Pacific oysters may cause restrictions on habitat use by native mussels in the Wadden Sea. *Journal of Experimental Marine Biology and Ecology* 328: 211-227
- Dijkema R (1997) Molluscan fisheries and culture in the Netherlands. In: Mackenzie Jr. CL, Burrell Jr. VG, Rosenfield A, Hobart WL (eds) *The history, present condition and future of the molluscan fisheries of North and Central America and Europe. Volume 3, Europe*. NOAA Technical Report NMFS, 129: pp. 115-135
- Dolmer P (2000) Algal concentration profiles above mussel beds. *Journal of Sea Research* 43: 113-119
- Drake JM, Lodge DM (2007) Hull fouling is a risk factor for intercontinental species exchange in aquatic ecosystems. *Aquatic Invasions* 2: 121-131

- Drinkwaard AC (1999a) Introductions and developments of oysters in the North Sea area: a review. *Helgoländer Meeresuntersuchungen* 52: 301-308
- Drinkwaard AC (1999b) History of cupped oyster in European coastal waters. *Aquaculture Europe* 15: 7-14 + 41
- Dubois S, Orvain F, Marin-Léal JC, Ropert M, Lefebvre S (2007) Small-scale spatial variability of food partitioning between cultivated oysters and associated suspension-feeding species, as revealed by stable isotopes. *Marine Ecology Progress Series* 336: 151-160
- Dupuy C, Le Gall S, Hartmann HJ, Bréret M (1999) Retention of ciliates and flagellates by the oyster *Crassostrea gigas* in French Atlantic coastal ponds: protists as a trophic link between bacterioplankton and benthic suspension-feeders. *Marine Ecology Progress Series* 177: 165-175
- Dupuy C, Vaquer A, Lam-Höai T, Rougier C, Mazouni N, Lautier J, Collos Y, Le Gall S (2000) Feeding rate of the oyster *Crassostrea gigas* in a natural planktonic community of the Mediterranean Thau Lagoon. *Marine Ecology Progress Series* 205: 171-184
- Engelsma MY, Haenen OLM (2004) Jaarverslag schelpdierziekten 2003. Resultaten van onderzoek naar ziekten, plagen en mortaliteiten in schelpdierbestanden van het Grevelingenmeer en de Oosterschelde in 2003. CIDC-Lelystad, Report 04/0009045, Lelystad, The Netherlands.
- Engelsma MY, Roozenburg I, Joly J-P (2008) First isolation of *Nocardia crassostreae* from Pacific oysters (*Crassostrea gigas*) in Europe. *Diseases of Aquatic Organisms* 80: 229-234
- English LJ, Maguire GB, Ward RD (2000) Genetic variation of wild and hatchery populations of the Pacific oyster, *Crassostrea gigas* (Thunberg), in Australia. *Aquaculture* 187: 283-298
- Eno NC, Clark RA, Sanderson WG (1997) Non-native marine species in British waters: a review and directory. Joint Nature Conservation Committee, Peterborough, United Kingdom
- Ernande B, Boudry P, Clobert J, Haure J (2003) Plasticity in resource allocation based life history traits in the Pacific oyster, *Crassostrea gigas*. I. Spatial variation in food abundance. *Journal of Evolutionary Biology* 17: 342-356
- Ertman SC, Jumars PA (1988) Effects of bivalve siphonal currents on the settlement of inert particles and larvae. *Journal of Marine Research* 46: 797-813
- Escaravage V, Van Avesaath P, Dubbeldam M, Craeymeersch JA (2006) Onderzoek naar de ontwikkeling van de Japanse oester in het Veerse Meer onder verschillende peilalternatieven. Netherlands Institute of Ecology - Centre for Estuarine and Marine Ecology (NIOO-CEME), Report 2006-02, Yerseke.
- Faasse M, Ligthart M (2007) The American oyster drill, *Urosalpinx cinerea* (Say, 1822), introduced to The Netherlands – increased risks after ban on TBT? *Aquatic Invasions* 2: 402-406
- Famme P, Røisgård HU, Jørgensen CB (1986) On direct measurement of pumping rates in the mussel *Mytilus edulis*. *Marine Biology* 92: 323-327
- FAO (2004) Aquaculture production 2002. FAO Fishery Information, Data and Statistics Unit, Rome.
- Fernandes S, Sobral P, Van Duren L (2007) Clearance rates of *Cerastoderma edule* under increasing current velocity. *Continental Shelf Research* 27: 1104-1115
- Fields DM, Yen J (1997) The escape behavior of marine copepods in response to a quantifiable fluid mechanical disturbance. *Journal of Plankton Research* 19: 1289-1304
- Filice FP (1958) Invertebrates from the estuarine portion of San Francisco Bay and some factors influencing their distribution. *Wasmann Journal of Biology* 16: 159-211
- Finelli CM, Wetzel DS (2003) Behavior of oyster (*Crassostrea virginica*) larvae in flume boundary layer flows. *Marine Biology* 143: 703-711
- Fitt WK, Coon SL (1992) Evidence for ammonia as a natural cue for recruitment of oyster larvae to oyster beds in a Georgia salt marsh. *Biological Bulletin* 182: 401-408
- Foster-Smith RL (1975) The effect of concentration of suspension on the filtration rates and pseudofaecal production for *Mytilus edulis* L., *Cerastoderma edule* (L.) and *Venerupis pullastra* (Montagu). *Journal of Experimental Marine Biology and Ecology* 17: 1-22
- Frank DM, Ward JE, Shumway SE, Holohan BA, Gray C (2008) Application of particle image velocimetry to the study of suspension feeding in marine invertebrates. *Marine and Freshwater Behaviour and Physiology* 41: 1-18
- Fréchette M, Butman CA, Geyer WR (1989) The importance of boundary-layer flows in supplying phytoplankton to the benthic suspension feeder, *Mytilus edulis* L. *Limnology and Oceanography* 34: 19-36
- Fritts TH, Rodda GH (1998) The role of introduced species in the degradation of island ecosystems: A case history of Guam. *Annual Review of Ecology and Systematics* 29: 113-140
- Fritts TH (2002) Economic costs of electrical system instability and power outages caused by snakes on the island of Guam. *International Biodeterioration and Biodegradation* 49: 93-100
- Fujiya M (1970) Oyster farming in Japan. *Helgoländer Meeresuntersuchungen* 20: 464-479
- Fukui Y (1988) Comparative studies on the life history of the grapsid crabs (Crustacea, Brachyura) inhabiting intertidal cobble and boulder shores. *Publications of the Seto Marine Biological Laboratory* 33: 121-162

- Galil BS (2007) Loss or gain? Invasive aliens and biodiversity in the Mediterranean Sea. *Marine Pollution Bulletin* 55: 314-322
- Galleni L, Tongiorgi P, Ferrero E, Salghetti U (1980) *Stylochus mediterraneus* (Turbellaria Polycladida), a predator of *Mytilus galloprovincialis*. *Marine Biology* 35: 317-326
- Geller JB, Walton ED, Grosholz ED, Ruiz GM (1997) Cryptic invasions of the crab *Carcinus* detected by molecular phylogeography. *Molecular Ecology* 6: 901-906
- Gerdes D (1983a) The Pacific oyster *Crassostrea gigas*. Part II. Oxygen consumption of larvae and adults. *Aquaculture* 31: 221-231
- Gerdes D (1983b) The Pacific oyster *Crassostrea gigas*. Part I. Feeding behaviour of larvae and adults. *Aquaculture* 31: 195-219
- Geurts van Kessel AJM, Kater BJ, Prins TC (2003) Veranderende draagkracht van de Oosterschelde voor kokkels. National Institute for Coastal and Marine Management (RIKZ) & Netherlands Institute for Fisheries Research (RIVO) Report RIKZ/2003.043 / RIVO C062/03, Middelburg, The Netherlands.
- Goldschmidt T, Witte F, Wanink J (1993) Cascading effects of the introduced Nile perch on the detritivorous/phytoplanktivorous species in the sublittoral areas of Lake Victoria. *Conservation Biology* 7: 686-700
- Gollasch S (2002) The importance of ship hull fouling as a vector of species introductions into the North Sea. *Biofouling* 18: 105-121
- Gosling E (2003) Bivalve Molluscs. Biology, Ecology and Culture. Blackwell Publishing, Oxford
- Gosselin LA, Qian PY (1997) Juvenile mortality in benthic marine invertebrates. *Marine Ecology Progress Series* 146: 265-282
- Goud J, Titselaar FFLM, Mulder G (2008) Weer een 'verstekeling': de Japanse Stekelhoren *Ocenebrellus inornatus* (Récluz, 1851) (Gastropoda, Muricidae) levend aangetroffen in de Oosterschelde. *Spirula* 365: 134-136
- Grabowski JH (2004) Habitat complexity disrupts predator-prey interactions but not the trophic cascade on oyster reefs. *Ecology* 85: 995-1004
- Gray JS (1997) Marine biodiversity: patterns, threats and conservation needs. *Biodiversity and Conservation* 6: 153-175
- Green RH (1971) A multivariate statistical approach to the Hutchinsonian niche: Bivalve molluscs of central Canada. *Ecology* 52: 544-556
- Green S, Visser AW, Titelman J, Kiørboe T (2003) Escape responses of copepod nauplii in the flow field of the blue mussel, *Mytilus edulis*. *Marine Biology* 142: 727-733
- Grizel H, Héral M (1991) Introduction into France of the Japanese oyster (*Crassostrea gigas*). *ICES Journal of Marine Science* 47: 399-403
- Grosholz ED, Ruiz GM, Dean CA, Shirley KA, Maron JL, Connors PG (2000) The impacts of a nonindigenous marine predator in a California bay. *Ecology* 81: 1206-1224
- Gruet Y, Héral M, Robert JM (1976) Premières observations sur l'introduction de la faune associée au naissain d'huîtres Japonaises *Crassostrea gigas* (Thunberg), importé sur la côte Atlantique Française. *Cahiers de Biologie Marine* 17: 173-184
- Gutiérrez JL, Jones CG, Strayer DL, Iribarne OO (2003) Mollusks as ecosystem engineers: the role of shell production in aquatic habitats. *Oikos* 101: 79-90
- Haenen O (2001) Jaarverslag Oesterziekten 2000. Resultaten in 2000 van onderzoek naar ziekten, plagen en mortaliteiten in de oesterbestanden van de Oosterschelde (Yerseke bank) en het Grevelingenmeer. ID Lelystad, ID 01/00-10833, Lelystad, The Netherlands.
- Hamdoun AM, Cheney DP, Cherr GN (2003) Phenotypic plasticity of HSP70 and HSP70 gene expression in the Pacific oyster (*Crassostrea gigas*): implications for thermal limits and induction of thermal tolerance. *The Biological Bulletin* 205: 160-169.
- Harding JM, Mann R (1999) Observations on the biology of the veined rapa whelk, *Rapana venosa* (Valenciennes, 1846) in the Chesapeake Bay. *Journal of Shellfish Research* 18: 9-17
- Hawkins AJS, Bayne BL, Bougrier S, Héral M, Iglesias JIP, Navarro E, Smith RFM, Urrutia MB (1998) Some general relationships in comparing the feeding physiology of suspension-feeding bivalve molluscs. *Journal of Experimental Marine Biology and Ecology* 219: 87-103
- Hawkins AJS, Fang JG, Pascoe PL, Zhang JH, Zhang XL, Zhu MY (2001) Modelling short-term responsive adjustments in particle clearance rate among bivalve suspension-feeders: separate unimodal effects of seston volume and composition in the scallop *Chlamys farreri*. *Journal of Experimental Marine Biology and Ecology* 262: 61-73
- Hayward PJ, Ryland JS (1990) The Marine Fauna of the British Isles and North-West Europe. Volume II: Molluscs to Chordates. Clarendon Press, Oxford
- Hebert PDN, Wilson CC, Murdoch MH, Lazar R (1991) Demography and ecological impacts of the invading mollusc *Dreissena polymorpha*. *Canadian Journal of Zoology* 69: 405-409

- Hedgecock D, Langdon C, Blouin M, Allen SKJ (1996) Genetic improvement of cultured Pacific oysters by selection. Agricultural Experiment Station, Oregon State University, Coastal Marine Experiment Station Annual Report, Special Report 968, 40 pp.
- Heip CHR, Goosen NK, Herman PMJ, Kromkamp JC, Middelburg J, Soetaert K (1995) Production and consumption of biological particles in temperate tidal estuaries. *Oceanography and Marine Biology: an Annual Review* 33: 1-149
- Helm MM, Bourne N, Lovatelli A (2004) Hatchery culture of bivalves - A practical manual. FAO Fisheries Technical Paper 471, FAO, Rome.
- Hendriks IE (2004) Flow dependent processes in settlement of intertidal bivalve larvae. PhD thesis, University of Groningen - Department of Marine Biology, the Netherlands, 160 pp.
- Hendriks IE, Van Duren LA, Herman PMJ (2005) Image analysis techniques: A tool for the identification of bivalve larvae? *Journal of Sea Research* 54: 151-162
- Hendriks IE, Van Duren LA, Herman PMJ (2006) Turbulence levels in a flume compared to the field: Implications for larval settlement studies. *Journal of Sea Research* 55: 15-29
- Herborg LM, Rushton SP, Clare AS, Bentley AS (2003) Spread of the Chinese mitten crab (*Eriocheir sinensis* H. Milne Edwards) in continental Europe: analysis of a historical data set. *Hydrobiologia* 503: 21-28
- Hiddink JG (2002) The adaptive value of migrations for the bivalve *Macoma balthica*. PhD thesis, University of Groningen - Department of Marine Biology, the Netherlands, 172 pp.
- Hiddink JG, Marijnissen SAE, Troost K, Wolff WJ (2002) Predation on 0-group and older year classes of the bivalve *Macoma balthica*: interaction of size selection and intertidal distribution of epibenthic predators. *Journal of Experimental Marine Biology and Ecology* 269: 223-248
- Hidu H (1969) Gregarious setting in the American Oyster *Crassostrea virginica* Gmelin. *Chesapeake Science* 10: 85-92
- Hidu H, Haskin HH (1978) Swimming speeds of oyster larvae of *Crassostrea virginica* in different salinities and temperatures. *Estuaries* 1: 252-255
- Hidu H, Valleau WG, Veitch FP (1978) Gregarious setting in European and American oysters - response to surface chemistry vs. waterborne pheromones. *Proceedings of the National Shellfisheries Association* 68: 11-16
- Hinsch KD (1993) Particle image velocimetry. In: Sirohi RS (ed) *Speckle metrology*. Marcel Dekker, New York, pp 235-324
- Hoek PPC (1902) Rapport over de oorzaken van den achteruitgang in hoedanigheid van de zeeuwsche oester. Staatsuitgeverij, Den Haag, The Netherlands, 176 pp.
- Holland BS (2000) Genetics of marine bioinvasions. *Hydrobiologia* 420: 63-71
- Honkoop PJC, Van der Meer J (1998) Experimentally induced effects of water temperature and immersion time on reproductive output of bivalves in the Wadden Sea. *Journal of Experimental Marine Biology and Ecology* 220: 227-246
- Honkoop PJC, Bayne BL, Drent J (2003) Flexibility of size of gills and palps in the Sydney rock oyster *Saxostrea glomerata* (Gould, 1850) and the Pacific oyster *Crassostrea gigas* (Thunberg, 1793). *Journal of Experimental Marine Biology and Ecology* 282: 113-133
- Hostens K, Hamerlynck O (1994) The mobile epifauna of the soft bottoms in the subtidal Oosterschelde estuary: structure, function and impact of the storm-surge barrier. *Hydrobiologia* 282/283: 479-496
- Hulme PE, Bacher S, Kenis M, Klotz S, Kühn I, Minchin D, Nentwig W, Olenin S, Panov V, Pergl J, Pyšek P, Roques A, Sol D, Solarz W, Vilà M (2008) Grasping at the routes of biological invasions: a framework for integrating pathways into policy. *Journal of Applied Ecology* 45: 403-414
- Imai T, Sakai S (1961) Study of breeding of Japanese Oyster, *Crassostrea gigas*. *Tohoku Journal of Agricultural Research* 12: 125-171
- Jakobsen HH (2001) Escape response of planktonic protists to fluid mechanical signals. *Marine Ecology Progress Series* 214: 67-78
- Jasprica N, Carić M, Bolotin J, Rudenjak-Lukenda M (1997) The Mediterranean mussel (*Mytilus galloprovincialis* Lmk.) growth rate response to phytoplankton and microzooplankton population densities in the Mali Ston Bay (Southern Adriatic). *Periodicum Biologorum* 99: 255-264
- Jensen KT, Jensen JN (1985) The importance of some epibenthic predators on the density of juvenile benthic macrofauna in the Danish Wadden Sea. *Journal of Experimental Marine Biology and Ecology* 89: 157-174
- Johnson KB, Shanks AL (2003) Low rates of predation on planktonic marine invertebrate larvae. *Marine Ecology Progress Series* 248: 125-139
- Jonckheere I (2006) Nieuwe vestigingsplaats voor Japanse oesters *Crassostrea gigas* (Thunberg, 1793). *De Strandvlo* 26: 135-138
- Jones CG, Lawton JH, Shachak M (1994) Organisms as ecosystem engineers. *Oikos* 69: 373-386
- Jones HD, Richards OG, Southern TA (1992) Gill dimensions, water pumping rate and body size in the mussel *Mytilus edulis* L. *Journal of Experimental Marine Biology and Ecology* 155: 213-237

- Jonsson PR, André C, Lindegarth M (1991) Swimming behaviour of marine bivalve larvae in a flume boundary-layer flow: evidence for near-bottom confinement. *Marine Ecology Progress Series* 79: 67-76
- Jonsson PR, Petersen JK, Karlsson Ö, Loo L-O, Nilsson S (2005) Particle depletion above experimental bivalve beds: In situ measurements and numerical modelling of bivalve filtration in the boundary layer. *Limnology and Oceanography* 50: 1989-1998
- Jørgensen CB (1981) Mortality, growth and grazing impact of a cohort of bivalve larvae, *Mytilus edulis* L. *Ophelia* 20: 185-192
- Kamermans P (1993) Food limitation in cockles (*Cerastoderma edule* (L.)): influences of location on tidal flat and of nearby presence of mussel beds. *Netherlands Journal of Sea Research* 31: 71-81
- Kamermans P, Smaal AC (2002) Mussel culture and cockle fisheries in the Netherlands: finding a balance between economy and ecology. *Journal of Shellfish Research* 21: 509-517
- Kang SG, Choi KS, Bulgakov AA, Kim Y, Kim SY (2003) Enzyme-linked immunosorbent assay (ELISA) used in quantification of reproductive output in the Pacific oyster, *Crassostrea gigas*, in Korea. *Journal of Experimental Marine Biology and Ecology* 282: 1-21
- Karlsson Ö, Jonsson PR, Larsson AI (2003) Do large seston particles contribute to the diet of the bivalve *Cerastoderma edule*? *Marine Ecology Progress Series* 261: 161-173
- Kater B, Kesteloo J (2003) Mosselbestanden in de Oosterschelde 1992-2002. Netherlands Institute for Fisheries Research (RIVO), Report C002/03, Yerseke, the Netherlands.
- Kater BJ (2003) De voedselsituatie voor kokkels in de Oosterschelde. Netherlands Institute for Fisheries Research (RIVO), Report C018/03, Yerseke, the Netherlands.
- Kater BJ, Baars JMDD (2004) The potential of aerial photography for estimating surface areas of intertidal Pacific oyster beds (*Crassostrea gigas*). *Journal of Shellfish Research* 23: 773-779
- Kater BJ, Geurts van Kessel AJM, Baars JMDD (2006) Distribution of cockles *Cerastoderma edule* in the Eastern Scheldt: habitat mapping with abiotic variables. *Marine Ecology Progress Series* 318: 221-227
- Kato K (1944) Polycladida of Japan. *Sigenkagaku Kenkyusho* 1: 257-318
- Keane RM, Crawley MJ (2002) Exotic plant invasions and the enemy release hypothesis. *Trends in Ecology and Evolution* 14: 164-170
- Keddy PA, Twolan-Strutt L, Wisheu IC (1994) Competitive effect and response ranking in 20 wetland plants: are they consistent across three environments? *Journal of Ecology* 82: 635-643
- Keough MJ (1998) Responses of settling invertebrate larvae to the presence of established recruits. *Journal of Experimental Marine Biology and Ecology* 231: 1-19
- Kerckhof F (1997) De schaalhoorn *Patella vulgata* en de Japanse oester *Crassostrea gigas* na de koude winters 1995/1996 en 1996/1997. *De Strandvlo* 17: 49-51
- Kerckhof F, Vink RJ, Nieweg DC, Post JNJ (2006) The veined whelk *Rapana venosa* has reached the North Sea. *Aquatic Invasions* 1: 35-37
- Kerckhof F, Haelters J, Gollasch S (2007) Alien species in the marine and brackish ecosystem: the situation in Belgian waters. *Aquatic Invasions* 2: 243-257
- Kerckhof F (in prep.) Verwilderde Japanse oesters *Crassostrea gigas* in de Oosterschelde al eerder dan 1975. . In preparation for publication in *Het Zeepaard*
- Kesteloo JJ, Van Stralen MR, Fey F, Jol J, Goudswaard PC (2007) Het kokkelbestand in de Nederlandse kustwateren in 2007. Wageningen IMARES, Institute for Marine Resources and Ecosystem Studies, Report C071/07, Yerseke, the Netherlands.
- Ketelaars HAM (2004) Range extensions of Ponto-Caspian aquatic invertebrates in Continental Europe. *NATO Science Series* 35: 209-236
- Kimmerer WJ, Gartside E, Orsi JJ (1994) Predation by an introduced clam as the likely cause of substantial declines in zooplankton of San Francisco Bay. *Marine Ecology Progress Series* 113: 81-93
- Kingsford MJ, Leis JM, Shanks A, Lindemant KC, Morgan SG, Pineda J (2002) Sensory environments, larval abilities and local self-recruitment. *Bulletin of Marine Science* 70: 309-340
- Kiorboe T, Saiz E, Visser AW (1999) Hydrodynamic signal perception in the copepod *Acartia tonsa*. *Marine Ecology Progress Series* 179: 97-111
- Kiorboe T, Visser AW (1999) Predator and prey perception in copepods due to hydromechanical signals. *Marine Ecology Progress Series* 179: 81-95
- Knights AM, Crowe TP, Burnell G (2006) Mechanisms of larval transport: vertical distribution of bivalve larvae varies with tidal conditions. *Marine Ecology Progress Series* 326: 167-174
- Kolar CS, Lodge DM (2001) Progress in invasion biology: predicting invaders. *Trends in Ecology and Evolution* 16: 199-204
- Kooijman SALM (1986) Energy budgets can explain body size relations. *Journal of Theoretical Biology* 121: 269-282

- Kooijman SALM (2000) Dynamic Energy and Mass Budgets in Biological Systems. Cambridge University Press, Cambridge
- Korringa P (1941) Experiments and observations on swarming, pelagic life and setting in the European flat oyster *Ostrea edulis* L. Archives Néerlandaises de Zoologie 5: 1-249
- Korringa P (1951) Polydora als vijand van de oestercultuur. Ministerie van Landbouw, Visserij en Voedselvoorziening
- Korringa P (1952) Recent advances in oyster biology. The Quarterly Review of Biology 27: 266 - 308, 339 - 365
- Korringa P (1965) De Portugese oester, *Crassostrea angulata*, in Nederland. Basteria 29: 18-22
- Korringa P (1976a) Farming the flat oysters of the genus *Ostrea*. Elsevier Scientific Publishing Company, Amsterdam
- Korringa P (1976b) Farming the cupped oysters of the genus *Crassostrea*. Elsevier Scientific Publishing Company, Amsterdam
- Kristensen I (1957) Differences in density and growth in a cockle population in the Dutch Wadden Sea. Archives Néerlandaises de Zoologie 12: 351-453
- LaBarbera M (1974) Calcification of the first larval shell of *Tridacna squamosa* (Tridacnidae; Bivalvia). Marine Biology 25: 233-238
- Larsen PS, Røisgård HU (1997) Biomixing generated by benthic filter feeders: a diffusion model for near-bottom phytoplankton depletion. Journal of Sea Research 37: 81-90
- Lassen J, Kortegård M, Røisgård HU, Friedrichs M, Graf G, Larsen PS (2006) Down-mixing of phytoplankton above filter-feeding mussels - interplay between water flow and biomixing. Marine Ecology Progress Series 314: 77-88
- Lavoie RE (2005) Oyster culture in North America. History, present and future. Oyster Research Institute News 17
- Leewis RJ, Waardenburg HW, Van der Tol MWM (1994) Biomass and standing stock on sublittoral hard substrates in the Oosterschelde estuary (SW Netherlands). Hydrobiologia 282/283: 397-412
- Lehane C, Davenport J (2002) Ingestion of mesozooplankton by three species of bivalve; *Mytilus edulis*, *Cerastoderma edule* and *Aequipecten opercularis*. Journal of the Marine Biological Association of the United Kingdom 82: 615-619
- Lehane C, Davenport J (2004) Ingestion of bivalve larvae by *Mytilus edulis*: experimental and field demonstrations of larviphagy in farmed blue mussels. Marine Biology 145: 101-107
- Leonard GH, Bertness MD, Yund PO (1999) Crab predation, waterborne cues, and inducible defenses in the blue mussel, *Mytilus edulis*. Ecology 80: 1-14
- Levitan DR (1995) The ecology of fertilization in free-spawning invertebrates. In: McEdward LR (ed) Ecology of Marine Invertebrate Larvae. CRC Press, Boca Raton, USA, pp 123-156
- Levitan DR (2006) The relationship between egg size and fertilization success in broadcast-spawning marine invertebrates. Integrative and Comparative Biology 46: 298-311
- Liu H, Stiling P (2006) Testing the enemy release hypothesis: a review and meta-analysis. Biological Invasions 8: 1535-1545
- Lodge DM (1993) Biological invasions: Lessons for ecology. Trends in Ecology and Evolution 8: 133-137
- Loosanoff VL, Davis HC, Chanley PE (1966) Dimensions and shapes of larvae of some marine bivalve molluscs. Malacologia 4: 351-435
- Luttikhuisen PC, Honkoop PJC, Drent J, Van der Meer J (2004) A general solution for optimal egg size during external fertilization, extended scope for intermediate optimal egg size and the introduction of Don Ottavio 'tango'. Journal of Theoretical Biology 231: 333-343
- Maar M, Nielsen TG, Bolding K, Burchard H, Visser AW (2007) Grazing effects of blue mussel *Mytilus edulis* on the pelagic food web under different turbulence conditions. Marine Ecology Progress Series 339: 199-213
- Maas Geesteranus RA (1942) On the formation of banks by *Mytilus edulis* L. Archives Néerlandaises de Zoologie 6: 283-326
- MacIsaac HJ, Sprules WG, Leach JH (1991) Ingestion of small-bodied zooplankton by zebra mussels (*Dreissena polymorpha*): can cannibalism on larvae influence population dynamics? Canadian Journal of Fisheries and Aquatic Sciences 48: 2051-2060
- Mann R, Wolf CC (1983) Swimming behaviour of larvae of the ocean quahog *Arctica islandica* in response to pressure and temperature. Marine Ecology Progress Series 13: 211-218
- Mann R (1988) Distribution of larvae at a frontal system in the James River, Virginia. Marine Ecology Progress Series 50: 29-44
- Mann R, Rainer JS (1990) Effect of decreasing oxygen tension on swimming rate of *Crassostrea virginica* (Gmelin, 1791) larvae. Journal of Shellfish Research 9: 323-327
- Mann R, Bureson EM, Baker PK (1991) The decline of the Virginia oyster fishery in Chesapeake Bay: Considerations for introduction of a non-endemic species, *Crassostrea gigas* (Thunberg, 1793). Journal of Shellfish Research 10: 379-388
- Mann R, Harding JM (2000) Invasion of the North American Atlantic coast by a large predatory Asian mollusc. Biological Invasions 2: 7-22

- Martel C, Viard F, Bourguet D, Garcia-Meunier P (2004) Invasion by the marine gastropod *Ocenebrellus inornatus* in France I. Scenario for the source of introduction. *Journal of Experimental Marine Biology and Ecology* 305: 155-170
- Marvier M, Kareiva P, Neubert MG (2004) Habitat destruction, fragmentation, and disturbance promote invasion by habitat generalists in a multispecies metapopulation. *Risk Analysis* 24: 869-878
- Mees J, Reijnders PJH (1994) The harbour seal, *Phoca vitulina*, in the Oosterschelde: decline and possibilities for recovery. *Hydrobiologia* 282/283: 547-555
- Meire PM (1993) The impact of bird predation on marine and estuarine bivalve populations: a selective review of patterns and underlying causes. In: Dame RF (ed) *Bivalve Filter Feeders in Estuarine and Coastal Ecosystem Processes*, pp 197-243
- Meire PM, Schekkerman H, Meiningen PL (1994) Consumption of benthic invertebrates by waterbirds in the Oosterschelde estuary, SW Netherlands. *Hydrobiologia* 282/283: 525-564
- Mileikovsky SA (1974) On predation of pelagic larvae and early juveniles of marine bottom invertebrates by adult benthic invertebrates and their passing alive through their predators. *Marine Biology* 26: 303-311
- Milke LM, Ward JE (2003) Influence of diet on pre-ingestive particle processing in bivalves II. Residence time in the pallial cavity and handling time on the labial palps. *Journal of Experimental Marine Biology and Ecology* 293: 151-172
- Mills EL, Leach JH, Carlton JT, Secor CL (1993) Exotic species in the Great Lakes: a history of biotic crises and anthropogenic introductions. *Journal of Great Lakes Research* 19: 1-54
- Möhlenberg F, Riisgård HU (1978) Efficiency of particle retention in 13 species of suspension feeding bivalves. *Ophelia* 17: 239-246
- Möhlenberg F, Riisgård HU (1979) Filtration rate, using a new indirect technique, in thirteen species of suspension-feeding bivalves. *Marine Biology* 54: 143-147
- Morgan SG (1995) The timing of larval release. In: McEdward LR (ed) *The Ecology of Marine Invertebrate Larvae*. CRC Press, Boca Raton, USA, pp 157-191
- Morton B (1997) The aquatic nuisance species problem: a global perspective and review. In: D'Itri FM (ed) *Zebra Mussels and Aquatic Nuisance Species*. CRC Press, Boca Raton, USA, pp 1 - 54
- Navarro E, Iglesias JIP, Ortega MM (1992) Natural sediment as a food source for the cockle *Cerastoderma edule* (L.): effect of variable particle concentration on feeding, digestion and the scope for growth. *Journal of Experimental Marine Biology and Ecology* 156: 69-87
- Nehls G, Thiel M (1993) Large-scale distribution patterns of the mussel *Mytilus edulis* in the Wadden Sea of Schleswig-Holstein: do storms structure the ecosystem? *Netherlands Journal of Sea Research* 31: 181-187
- Nehls G, Hertzler I, Scheiffarth G (1997) Stable mussel *Mytilus edulis* beds in the Wadden Sea - They're just for the birds *Helgoländer Meeresuntersuchungen* 51: 361-372
- Nehls G, Diederich S, Thielges DW, Strasser M (2006) Wadden Sea mussel beds invaded by oysters and slipper limpets: competition or climate control? *Helgoland Marine Research* 60: 135-143
- Nehring S (2006) Four arguments why so many alien species settle into estuaries, with special reference to the German river Elbe. *Helgoland Marine Research* 60: 127-134
- Nestlerode JA, Luckenbach MW, O'Beirn FX (2007) Settlement and survival of the oyster *Crassostrea virginica* on created oyster reef habitats in Chesapeake Bay. *Restoration Ecology* 15: 273-283
- Newell CR, Wildish DJ, MacDonald BA (2001) The effects of velocity and seston concentration on the exhalant siphon area, valve gape and filtration rate of the mussel *Mytilus edulis*. *Journal of Experimental Marine Biology and Ecology* 262: 91-111
- Nielsen TG, Maar M (2007) Effects of a blue mussel (*Mytilus edulis*) bed on vertical distribution and composition of the pelagic food web. *Marine Ecology Progress Series* 339: 185-198
- Nienhuis PH, Smaal AC (1994a) The Oosterschelde Estuary (The Netherlands): a case-study of a changing ecosystem. Kluwer Academic Publishers, Dordrecht, the Netherlands, pp 597
- Nienhuis PH, Smaal AC (1994b) The Oosterschelde estuary, a case-study of a changing ecosystem: an introduction. *Hydrobiologia* 282/283: 1-14
- Nikora V, Green MO, Thrush SF, Hume TM, Goring D (2002) Structure of the internal boundary layer over a patch of pinnid bivalves (*Atrina zelandica*) in an estuary. *Journal of Marine Research* 60: 121-150
- Noren F, Haamer J, Lindahl O (1999) Changes in the plankton community passing a *Mytilus edulis* mussel bed. *Marine Ecology Progress Series* 191: 187-194
- Norušis MJ (2008) *SPSS 16.0 Statistical Procedures Companion*. Prentice Hall, Upper Saddle River, NJ, USA
- O'Riordan CA, Monismith SG, Koseff JR (1995) The effect of bivalve excurrent jet dynamics on mass transfer in a benthic boundary layer. *Limnology and Oceanography* 40: 330-344

- Ó Foighil D, Gaffney PM, Hilbish TJ (1995) Differences in mitochondrial 16s ribosomal gene sequences allow discrimination among American [*Crassostrea virginica* (Gmelin)] and Asian [*C. gigas* (Thunberg) *C. ariakensis* Wakiya] oyster species. *Journal of Experimental Marine Biology and Ecology* 192: 211-220
- Occhipinti-Ambrogi A, Savini D (2003) Biological invasions as a component of global change in stressed marine ecosystems. *Marine Pollution Bulletin* 46: 542-551
- Occhipinti-Ambrogi A (2007) Global change and marine communities: Alien species and climate change. *Marine Pollution Bulletin* 55: 342-352
- Ogutu-Ohwayo R (1990) The decline of the native fishes of lakes Victoria and Kyoga (East Africa) and the impact of introduced species, especially the Nile perch, *Lates niloticus*, and the Nile tilapia, *Oreochromis niloticus*. *Environmental Biology of Fishes* 27: 81-96
- Olden JD, LeRoy Poff N (2003) Toward a mechanistic understanding and prediction of biotic homogenization. *The American Naturalist* 162: 442-460
- Olsen OT (1883) The piscatorial atlas of the North Sea, English and St. George's Channels, illustrating the fishing ports, boats, gear, species of fish (how, where, and when caught), and other information concerning fish and fisheries. Taylor and Francis, London
- Pascual MS, Zampatti EA (1995) Evidence of a chemically mediated adult-larval interaction triggering settlement in *Ostrea puelchana*: applications in hatchery production. *Aquaculture* 133: 33-44
- Pechenik JA (1999) On the advantages and disadvantages of larval stages in benthic marine invertebrate life cycles. *Marine Ecology Progress Series* 177: 269-297
- Perdon KJ, Smaal AC (2000) Het bestand aan Japanse oesters op de platen van de Oosterschelde. Netherlands Institute for Fisheries Research (RIVO), Report C030/00, Yerseke, the Netherlands.
- Petersen JK, Bougrier S, Smaal AC, Garen P, Robert S, Larsen JEN, Brummelhuis EBM (2004) Intercalibration of mussel *Mytilus edulis* clearance rate measurements. *Marine Ecology Progress Series* 267: 187-194
- Petersen KS, Rasmussen KL, Heinemeler J, Rudd N (1992) Clams before Columbus? *Nature* 359: 679
- Peterson CH, Black R (1987) Resource depletion by active suspension feeders on tidal flats: influence of local density. *Limnology and Oceanography* 32: 143-166
- Pianka ER (1970) On r- and K-selection. *American Naturalist* 104: 592-597
- Pimentel D, Zuniga R, Morrison D (2005) Update on the environmental and economic costs associated with alien-invasive species in the United States. *Ecological Economics* 52: 273-288
- Porter ET, Cornwell JC, Sanford LP (2004) Effect of oysters *Crassostrea virginica* and bottom shear velocity on benthic-pelagic coupling and estuarine water quality. *Marine Ecology Progress Series* 271: 61-75
- Pouvreau S, Bodoy A, Buestel D (2000) In situ suspension feeding behaviour of the pearl oyster, *Pinctada margaritifera*: combined effects of body size and weather-related seston composition. *Aquaculture* 181: 91-113
- Prael A, Cragg SM, Henderson SM (2001) Behavioral responses of veliger larvae of *Crassostrea gigas* to leachate from wood treated with copper-chrome-arsenic (CCA): A potential bioassay of sublethal environmental effects of contaminants. *Journal of Shellfish Research* 20: 267-273
- Prins TC, Smaal AC, Pouwer AJ, Dankers N (1996) Filtration and resuspension of particulate matter and phytoplankton on an intertidal mussel bed in the Oosterschelde estuary (SW Netherlands). *Marine Ecology Progress Series* 142: 121-134
- Prins TC, Smaal AC, Dame RF (1998) A review of the feedbacks between bivalve grazing and ecosystem processes. *Aquatic Ecology* 31: 349-359
- Quayle DB (1988) Pacific oyster culture in British Columbia. *Canadian Bulletin of Fisheries and Aquatic Sciences* 218: 1-241
- Raby D, Lagadeuc Y, Dodson JJ, Mingelbier M (1994) Relationship between feeding and vertical distribution of bivalve larvae in stratified and mixed waters. *Marine Ecology Progress Series* 103: 275-284
- Reise K (1978) Experiments on epibenthic predation in the Wadden Sea Helgoländer Meeresuntersuchungen 31: 55-101
- Reise K (1998) Pacific oysters invade mussel beds in the European Wadden Sea. *Senckenbergiana Maritima* 28: 167-175
- Reise K, Gollasch S, Wolff WJ (1999) Introduced marine species of the North Sea coasts. *Helgoländer Meeresuntersuchungen* 52: 219-234
- Renault T (1996) Appearance and spread of diseases among bivalve molluscs in the northern hemisphere in relation to international trade. *Revue scientifique et technique de l'office international des épizooties* 15: 551-561
- Rico-Villa B, Pouvreau S, Robert R (2009) Influence of food density and temperature on ingestion, growth and settlement of Pacific oyster larvae, *Crassostrea gigas*. *Aquaculture* 287: 395-401
- Riera P, Stal IJ, Nieuwenhuize J (2002) $\delta^{13}\text{C}$ versus $\delta^{15}\text{N}$ of co-occurring molluscs within a community dominated by *Crassostrea gigas* and *Crepidula fornicata* (Oosterschelde, The Netherlands). *Marine Ecology Progress Series* 240: 291-295

- Riera P (2006) Trophic subsidies of *Crassostrea gigas*, *Mytilus edulis* and *Crepidula fornicata* in the Bay of Mont Saint Michel (France): A $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ investigation. *Estuarine, Coastal and Shelf Science* 72: 33-41
- Rüsgård HU (1977) On measurements of the filtration rates of suspension feeding bivalves in a flow system. *Ophelia* 16: 167-173
- Rüsgård HU, Randløv A (1981) Energy budgets, growth and filtration rates in *Mytilus edulis* at different algal concentrations. *Marine Biology* 61: 227-234
- Rüsgård HU, Randløv A, Hamburger K (1981) Oxygen consumption and clearance as a function of size in *Mytilus edulis* L. veliger larvae. *Ophelia* 20: 179-183
- Rüsgård HU (1988) Efficiency of particle retention and filtration rate in 6 species of Northeast American bivalves. *Marine Ecology Progress Series* 45: 217-223
- Rüsgård HU, Larsen PS (2000) Comparative ecophysiology of active zoobenthic filter feeding, essence of current knowledge. *Journal of Sea Research* 44: 169-193
- Rüsgård HU (2001) On measurement of filtration rates in bivalves - the stony road to reliable data: review and interpretation. *Marine Ecology Progress Series* 211: 275-291
- Rüsgård HU, Kittner C, Seerup DF (2003) Regulation of opening state and filtration rate in filter-feeding bivalves (*Cardium edule*, *Mytilus edulis*, *Mya arenaria*) in response to low algal concentrations. *Journal of Experimental Marine Biology and Ecology* 284: 105-127
- Rüsgård HU, Seerup DF, Jensen MH, Glob E, Larsen PS (2004) Grazing impact of filter-feeding zoobenthos in a Danish fjord. *Journal of Experimental Marine Biology and Ecology* 307: 261-271
- Rodríguez SR, Ojeda FP, Inestrosa NC (1993) Settlement of benthic marine invertebrates. *Marine Ecology Progress Series* 97: 193-207
- Rueda JL, Smaal AC (2002) Physiological response of *Spisula subtruncata* (da Costa, 1778) to different seston quantity and quality. *Hydrobiologia* 475/476: 505-511
- Rumrill SS (1990) Natural mortality of marine invertebrate larvae. *Ophelia* 32: 163-198
- Saito H, Nakanishi Y, Shigeta T, Umino T, Kawai K, Imabayashi H (2008) Effect of predation of fishes on oyster spats in Hiroshima Bay. *Nippon Suisan Gakkaishi* 74: 809-815
- Sakai AK, Allendorf FW, Holt JS, Lodge DM, Molofsky J, With KA, Baughman S, Cabin RJ, Cohen JE, Ellstrand NC, McCauley DE, O'Neil P, Parker IM, Thompson JN, Weller SG (2001) The population biology of invasive species. *Annual Review of Ecology and Systematics* 32: 305-332
- Schmidt A, Wehmann A, Dittmann S (2008) Population dynamics of the invasive Pacific oyster *Crassostrea gigas* during the early stages of an outbreak in the Wadden Sea (Germany). *Helgoland Marine Research* 62: 367-376
- Seed R (1976) Ecology. In: Bayne BL (ed) *Marine Mussels: their Ecology and Physiology*. Cambridge University Press, Cambridge, pp 13-65
- Shamseldin AA, Clegg JS, Friedman CS, Cherr GN, Pillai MC (1997) Induced thermotolerance in the Pacific oyster, *Crassostrea gigas*. *Journal of Shellfish Research* 16: 487-491
- Shanks AL, Brink L (2005) Upwelling, downwelling, and cross-shelf transport of bivalve larvae: test of a hypothesis. *Marine Ecology Progress Series* 302: 1-12
- Shatkin G, Shumway SE, Hawes R (1997) Considerations regarding the possible introduction of the Pacific Oyster (*Crassostrea gigas*) to the Gulf of Maine: a review of global experience. *Journal of Shellfish Research* 16: 463-477
- Shumway SE, Cucci TL, Newell RC, Yentsch CM (1985) Particle selection, ingestion and absorption in filter-feeding bivalves. *Journal of Experimental Marine Biology and Ecology* 91: 77-92
- Singarajah KV (1969) Escape reactions of zooplankton: the avoidance of a pursuing siphon tube. *Journal of Experimental Marine Biology and Ecology* 3: 171-178
- Singarajah KV (1975) Escape reactions of zooplankton: effects of light and turbulence. *Journal of the Marine Biological Association of the United Kingdom* 55: 627-639
- Sisternans WCH, Hummel H, Van Hoesel OJA, Markuse MM, Rietveld M, Van Soelen E (2005) Het macrobenthos van de Westerschelde, de Oosterschelde, het Veerse meer en het Grevelingenmeer in het najaar 2004. Netherlands Institute of Ecology - Centre for Estuarine and Marine Ecology (NIOO-CEME), Rapportage in het kader van het Biologisch Monitoring Programma, Yerseke, The Netherlands.
- Smaal AC (1997) Food supply and demand of bivalve suspension feeders in a tidal system. PhD thesis, University of Groningen, the Netherlands, 237 pp.
- Smaal AC, Twisk F (1997) Filtration and absorption of *Phaeocystis* cf. *globosa* by the mussel *Mytilus edulis* L. *Journal of Experimental Marine Biology and Ecology* 209: 33-46
- Smaal AC, Vonck APMA, Bakker M (1997) Seasonal variation in physiological energetics of *Mytilus edulis* and *Cerastoderma edule* of different size classes. *Journal of the Marine Biological Association of the United Kingdom* 77: 817-838
- Smaal AC, Lucas L (2000) Regulation and monitoring of marine aquaculture in The Netherlands. *Journal of Applied Ichthyology* 16: 187-191

- Smaal AC, Van Stralen MR, Schuiling E (2001) The interaction between shellfish culture and ecosystem processes. *Canadian Journal of Fisheries and Aquatic Sciences* 58: 991-1002
- Smaal AC, Van Stralen MR, Craeymeersch J (2005) Does the introduction of the Pacific oyster *Crassostrea gigas* lead to species shifts in the Wadden Sea? In: Dame RF, Olenin S (eds) *The Comparative Roles of Suspension-Feeders in Ecosystems*. Springer, pp 277-289
- Smaal AC, Wijsman JWM, Poelman M (2006) Proliferation of the Pacific oyster *Crassostrea gigas* in Dutch coastal waters and its consequences for human use. ICES Annual Science Conference 2006, theme session G: Human health risks and marine environmental quality, Maastricht, the Netherlands
- Smaal AC, Kater BJ, Wijsman JWM (in press) Introduction, establishment and expansion of the Pacific oyster *Crassostrea gigas* in the Oosterschelde (SW Netherlands). In press for publication in *Helgoland Marine Research*: available online: DOI 10.1007/s10152-10008-10138-10153
- Smies M, Huiskes AHL (1981) Holland's Eastern Scheldt estuary barrier scheme: some ecological considerations. *Ambio* 10: 158-165
- Smith LD, Wonham MJ, McCann LD, Ruiz GM, Hines AH, Carlton JT (1999) Invasion pressure to a ballast-flooded estuary and an assessment of inoculant survival. *Biological Invasions* 1: 67-87
- Spedding GR, Rignot EJM (1993) Performance analysis and application of grid interpolation techniques for fluid flows. *Experiments in Fluids* 15: 417-430
- Sprung M (1984) Physiological energetics of mussel larvae (*Mytilus edulis*). III. Respiration. *Marine Ecology Progress Series* 18: 171-178
- Stamhuis EJ, Videler JJ (1995) Quantitative flow analysis around aquatic animals using laser sheet particle image velocimetry. *Journal of Experimental Marine Biology and Ecology* 198: 283-294
- Stamhuis EJ, Videler JJ, Van Duren LA, Müller UK (2002) Applying digital particle image velocimetry to animal-generated flows: Traps, hurdles and cures in mapping steady and unsteady flows in Re regimes between 10^{-2} and 10^5 . *Experiments in Fluids* 33: 801-813
- Stamhuis EJ (2006) Basics and principles of particle image velocimetry (PIV) for mapping biogenic and biologically relevant flows. *Aquatic Ecology* 40: 463-479
- Steele S, Mulcahy MF (2001) Impact of the copepod *Mytilicola orientalis* on the Pacific oyster *Crassostrea gigas* in Ireland. *Diseases of Aquatic Organisms* 47: 145-149
- Stock JH (1993) Copepoda (Crustacea) associated with commercial and non-commercial Bivalvia in the East Scheldt, the Netherlands. *Bijdragen tot de Dierkunde* 63: 61-64
- Strasser M, Reinwald T, Reise K (2001) Differential effects of the severe winter of 1995/96 on the intertidal bivalves *Mytilus edulis*, *Cerastoderma edule* and *Mya arenaria* in the Northern Wadden Sea. *Helgoland Marine Research* 55: 190-197
- Strathmann RR, Leise E (1979) On feeding mechanisms and clearance rates of molluscan veligers. *Biological Bulletin* 157: 524-535
- Strathmann RR, Grünbaum D (2006) Good eaters, poor swimmers: compromises in larval form. *Integrative and Comparative Biology* 46: 312-322
- Strucker RCW, Arts FA, Lilipaly S (2008) Watervogels en zeezoogdieren in de Zoute Delta 2006/2007. Rijkswaterstaat Waterdienst, Report 2008.031, Vlissingen, The Netherlands.
- Tamburri MN, Finelli CM, Wethey DS, Zimmer-Faust RK (1996) Chemical induction of larval settlement behavior in flow. *Biological Bulletin* 191: 367-373
- Tamburri MN, Zimmer-Faust RK (1996) Suspension feeding: basic mechanisms controlling recognition and ingestion of larvae. *Limnology and Oceanography* 41: 1188-1197
- Tamburri MN, Zimmer RK, Zimmer CA (2007) Mechanisms reconciling gregarious larval settlement with adult cannibalism. *Ecological Monographs* 77: 255-268
- Taris N, Ernande B, McCombie H, Boudry P (2006) Phenotypic and genetic consequences of size selection at the larval stage in the Pacific oyster (*Crassostrea gigas*). *Journal of Experimental Marine Biology and Ecology* 333: 147-158
- Taylor DL (2005) Predatory impact of the green crab (*Carcinus maenas* Linnaeus) on post-settlement winter flounder (*Pseudopleuronectes americanus* Walbaum) as revealed by immunological dietary analysis. *Journal of Experimental Marine Biology and Ecology* 324: 112-126
- Thorson G (1946) Reproduction and larval development of Danish marine bottom invertebrates. Meddelelser fra Kommissionen for Danmarks Fiskeri- og Havundersøgelser, Plankton series 4: 532 pp
- Thorson G (1950) Reproductive and larval ecology of marine bottom invertebrates. *Biological Reviews of the Cambridge Philosophical Society* 25: 1-45
- Timko P (1979) Larviphagy and oophagy in benthic invertebrates: a demonstration for *Dendroaster excentricus* (Echinoidea). In: Stancyk S (ed) *Reproductive Ecology in Marine Invertebrates*. University of South Carolina Press, Columbia, pp 91-98

- Titelman J (2001) Swimming and escape behavior of copepod nauplii: implications for predator-prey interactions among copepods. *Marine Ecology Progress Series* 213: 203-213
- Titelman J, Kjørboe T (2003) Predator avoidance by nauplii. *Marine Ecology Progress Series* 247: 137-149
- Tritton DJ (1988) *Physical fluid dynamics*. Oxford University Press, New York
- Troost K, Kamermans P, Wolff WJ (2008a) Larviphagy in native bivalves and an introduced oyster. *Journal of Sea Research* 60: 157-163
- Troost K, Veldhuizen R, Stamhuis EJ, Wolff WJ (2008b) Can bivalve veligers escape feeding currents of adult bivalves? *Journal of Experimental Marine Biology and Ecology* 358: 185-196
- Troost K, Gelderman E, Kamermans P, Smaal AC, Wolff WJ (2009a) Effects of an increasing filter feeder stock on larval abundance in the Oosterschelde estuary (SW Netherlands). *Journal of Sea Research* 61: 153-164
- Troost K, Stamhuis EJ, Van Duren LA, Wolff WJ (2009b) Feeding current characteristics of three morphologically different bivalve suspension feeders, *Crassostrea gigas*, *Mytilus edulis* and *Cerastoderma edule*, in relation to food competition. *Marine Biology* 156: 355-372
- Turner EJ, Zimmer-Faust RK, Palmer MA, Luckenbach M, Pentcheff ND (1994) Settlement of oyster (*Crassostrea virginica*) larvae: Effects of water flow and a water-soluble chemical cue. *Limnology and Oceanography* 39: 1579-1593
- Tydemans P (1999) Japanse oesters in de Eemshaven. *Het Zeepaard* 59: 58-63
- Tydemans P, Kleef HL, De Vlas J (2002) Ontwikkeling van de Japanse oester (*Crassostrea gigas*) in het Eems-Dollard estuarium in de periode 1998-2001. National Institute for Coastal and Marine Management (RIKZ), Report (werkdokument) RIKZ/OS/2002.601x, Haren, the Netherlands.
- Tydemans P (2008) Japanse oesters naar de (Wadden)zee gedragen? *Het Zeepaard* 68: 109-114
- Utting SD, Spencer BE (1992) Introductions of marine bivalve molluscs into the United Kingdom for commercial culture - case histories. *ICES Marine Science Symposia* 194: 84-91
- Vahl O (1972) Porosity of the gill, oxygen consumption and pumping rate in *Cardium edule* (L.) (Bivalvia). *Ophelia* 10: 109-118
- Van Banning P (1991) Observations on bonamiasis in the stock of the European flat oyster, *Ostrea edulis*, in the Netherlands, with special reference to the recent developments in Lake Grevelingen. *Aquaculture* 93: 205-211
- Van Broekhoven W (2005) Macrofaunal diversity on beds of the Pacific oyster (*Crassostrea gigas*) in the Oosterschelde estuary. MSc thesis, University of Groningen, Department of Marine Biology, 36 pp.
- Van de Kam J, Ens B, Piersma T, Zwarts L (2004) *Shorebirds: an illustrated behavioural ecology*. KNNV Publishers, Utrecht, the Netherlands
- Van de Koppel J, Gascoigne JC, Theraulaz G, Rietkerk M, Mooij WM, Herman PMJ (2008) Experimental evidence for spatial self-organization and its emergent effects in mussel bed ecosystems. *Science* 322: 739-742
- Van der Veer HW, Feller RJ, Weber A, Witte JI (1998) Importance of predation by crustaceans upon bivalve spat in the intertidal zone of the Dutch Wadden Sea as revealed by immunological assays of gut contents. *Journal of Experimental Marine Biology and Ecology* 231: 139-157
- Van der Veer HW, Cardoso JFMP, Van der Meer J (2006) Estimation of DEB parameters for various Northeast Atlantic bivalve species. *Journal of Sea Research* 56: 107-124
- Van Duren L, Herman PMJ, Sandee AJJ, Heip CHR (2006) Effects of mussel filtering activity on boundary layer structure. *Journal of Sea Research* 55: 3-14
- Van Duren LA, Videler JJ (2003) Escape from viscosity: the kinematics and hydrodynamics of copepod foraging and escape swimming. *Journal of Experimental Biology* 206: 269-279
- Van Eck GTM, De Bruijckere FLG, De Meyer E, Maeckelbergh H (1998) Naar een schone Schelde. *Water: Tijdschrift over Waterproblematiek* 17: 293-303
- Van Stralen MR, Dijkema RD (1994) Mussel culture in a changing environment: the effects of a coastal engineering project on mussel culture (*Mytilus edulis* L.) in the Oosterschelde estuary (SW Netherlands). *Hydrobiologia* 282/283: 359-379
- Van Zanten E, Adriaanse LA (2008) Verminderd getij. Verkenning naar mogelijke maatregelen om het verlies van platen, slikken en schorren in de Oosterschelde te beperken. Rijkswaterstaat Zeeland, Middelburg, The Netherlands
- Visser AW (2001) Hydromechanical signals in the plankton. *Marine Ecology Progress Series* 222: 1-24
- Vitousek PM (1990) Biological invasions and ecosystem processes: towards an integration of population biology and ecosystem studies. *Oikos* 57: 7-13
- Vitousek PM, D'Antonio CM, Loope LL, Rejmánek M, Westbrooks R (1997) Introduced species: a significant component of human-caused global change. *New Zealand Journal of Ecology* 21: 1-16
- Wa Kang'eri AK (2005) Winter mortality and freeze tolerance in the Pacific oyster, *Crassostrea gigas* (Thunberg). MSc thesis, University of Groningen, Department of Marine Biology, 53 pp.

- Wallentinus I, Nyberg CD (2007) Introduced marine organisms as habitat modifiers. *Marine Pollution Bulletin* 55: 323-332
- Walne PR (1972) The influence of current speed, body size and water temperature on the filtration rate of five species of bivalves. *Journal of the Marine Biological Association of the United Kingdom* 52: 345-374
- Ward JE, Levinton JS, Shumway SE, Cucci T (1998) Particle sorting in bivalves: in vivo determination of the pallial organs of selection. *Marine Biology* 131: 283-292
- Wares JP, Goldwater DS, Kong BY, Cunningham CW (2002) Refuting a controversial case of a human-mediated marine species introduction. *Ecology Letters* 5: 577-584
- Wehrmann A, Herlyn M, Bungenstock F, Hertweck G, Millat G (2000) The distribution gap is closed - first record of naturally settled Pacific oysters *Crassostrea gigas* in the East Frisian Wadden Sea, North Sea. *Senckenbergiana Maritima* 30: 153-160
- Westeyn LPMJ, Kromkamp JC (1994) Turbidity, nutrients and phytoplankton primary production in the Oosterschelde (The Netherlands) before, during and after a large-scale coastal engineering project (1980-1990). In: Nienhuis PH, Smaal AC (eds) *The Oosterschelde estuary (the Netherlands): a case-study of a changing ecosystem*. Kluwer Academic Publishers, Dordrecht, pp 597
- Westeyn LPMJ, Duijn RNM, Kromkamp JC, Latuhihin MJ, Peene J, Pouwer A, Prins TC (2003) Verkenning draagkracht Oosterschelde. Onderzoek naar veranderingen en trends in de Oosterschelde in de periode 1990 t/m 2000. National Institute for Coastal and Marine Management (RWS-RIKZ), Report RIKZ/2003.049
- Widdows J (1991) Physiological ecology of mussel larvae. *Aquaculture* 94: 147-163
- Widdows J, Navarro JM (2007) Influence of current speed on clearance rate, algal cell depletion in the water column and resuspension of biodeposits of cockles (*Cerastoderma edule*). *Journal of Experimental Marine Biology and Ecology* 343: 44-51
- Wijsman JWM, Smaal AC (2006) Risk analysis of mussels transfer. Wageningen IMARES, Institute for Marine Resources and Ecosystem Studies, Report C044/06, Yerseke, the Netherlands.
- Wijsman JWM, Dubbeldam M, De Kluijver MJ, Van Zanten E, Van Stralen MR, Smaal AC (2008) Wegvisproef Japanse oesters in de Oosterschelde. Eindrapportage. Wageningen IMARES, Institute for Marine Resources and Ecosystem Studies, Report C063/08, Yerseke, The Netherlands.
- Wildish D, Kristmanson D (1997) *Benthic Suspension Feeders and Flow*, Cambridge University Press
- Wiles PJ, Van Duren LA, Häse C, Larsen J, Simpson JH (2006) Stratification and mixing in the Limfjorden in relation to mussel culture. *Journal of Marine Systems* 60: 129-143
- Williamson M (1996) *Biological Invasions*. Chapman & Hall, London
- Williamson M (2006) Explaining and predicting the success of invading species at different stages of invasion. *Biological Invasions* 8: 1561-1568
- Williamson MH, Fitter A (1996) The characters of successful invaders. *Biological Conservation* 78: 163-170
- Winter JE (1973) The filtration rate of *Mytilus edulis* and its dependence on algal concentration, measured by a continuous automatic recording apparatus. *Marine Biology* 22: 137-328
- Wolff WJ (1973) The estuary as a habitat. An analysis of data on the soft-bottom macrofauna of the estuarine area of the rivers Rhine, Meuse, and Scheldt. *Zoölogische Verhandelingen* 126: 1-242
- Wolff WJ (1999) Exotic invaders of the meso-oligohaline zone of estuaries in The Netherlands: why are there so many? *Helgoländer Meeresuntersuchungen* 52: 393-400
- Wolff WJ, Reise K (2002) Oyster imports as a vector for the introduction of alien species into northern and western European coastal waters. In: Leppäkoski E, Gollasch S, Olenin S (eds) *Invasive aquatic species of Europe. Distribution, impacts and management*. Kluwer Academic Publishers, Dordrecht, pp 193-205
- Wolff WJ (2005) Non-indigenous marine and estuarine species in The Netherlands. *Zoologische Mededelingen* 79: 116 pp
- Wong WH, Levinton JS, Fisher NS, Twining BS (2003a) Assimilation of micro- and mesozooplankton by zebra mussels: A demonstration of the food web link between zooplankton and benthic suspension feeders. *Limnology and Oceanography* 48: 308-312
- Wong WH, Levinton JS, Twining BS, Fisher NS, Kelaher BP, Alt AK (2003b) Assimilation of carbon from a rotifer by the mussels *Mytilus edulis* and *Perna viridis*: a potential food-web link. *Marine Ecology Progress Series* 253: 175-182
- Wong WH, Levinton JS (2004) Culture of the blue mussel *Mytilus edulis* (Linnaeus, 1758) fed both phytoplankton and zooplankton: a microcosm experiment. *Aquaculture Research* 35: 965-969
- Wong WH, Levinton JS (2006) The trophic linkage between zooplankton and benthic suspension feeders: direct evidence from analyses of bivalve faecal pellets. *Marine Biology* 148: 799-805
- Wonham MJ, Carlton JT (2005) Trends in marine biological invasions at local and regional scales: the Northeast Pacific Ocean as a model system. *Biological Invasions* 7: 369-392
- Wood L, Hargis WJ (1971) Transport of bivalve larvae in a tidal estuary. *Proceedings of the fourth European Marine Biology Symposium*. Cambridge University Press, Bangor, pp 29-44

- Wright LD, Friedrichs CT, Hepworth DA (1997) Effects of benthic biology on bottom boundary layer processes, Dry Tortugas Bank, Florida Keys. *Geo-Marine Letters* 17: 291-298
- Ysebaert T, De Neve L, Meire P (2000) The subtidal macrobenthos in the mesohaline part of the Schelde estuary (Belgium): influenced by man? *Journal of the Marine Biological Association of the United Kingdom* 80: 587-597
- Zwarts L, Wanink JH (1993) How the food supply harvestable by waders in the Wadden Sea depends on the variation in energy density, body weight, biomass, burying depth and behaviour of tidal-flat invertebrates. Netherlands *Journal of Sea Research* 31: 441-476

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